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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,325	01/29/2004	Laurence W. Davies	80210-952 ADB	1242

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EXAMINER

RUDDOCK, ULA CORINNA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/766,325	Applicant(s) DAVIES ET AL.	
	Examiner Ula C. Ruddock	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Examiner has carefully considered Applicant's response filed February 6, 2006. The double patenting rejection has been overcome.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Terminal Disclaimer

3. The terminal disclaimer filed on February 6, 2006, disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US 6,746,747 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

4. Claims 1, 2, 3, 5, 6, 7, 10-15 and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Davies et al. (US 6,881,288). Davies et al. disclose a reinforcing structure for use in the manufacture of a pultruded part (abstract). The part is shown as a hollow, pultruded body having a uniformly spaced outer wall structure, an inner wall structure, and a resin matrix. The reinforcing mat of the present invention is typically located at or near the wall structures to increase transverse strength. The pultruded part is used to make fenestration products such as windows, doors, and the like (col 7, ln 13-25). The reinforcing fibers comprise metal fibers (col 4, ln 6-7). The resin matrix comprises thermosetting materials such as polyurethanes (col 9, ln 49-52). The reinforcing fibers are arranged into a mat that can have two layers of angled reinforcing fibers (col 14, ln 66-67).

Rejection is maintained.

5. Claims 1, 2, 3, 5, 6, 7, 10-15 and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Davies et al. (US 6,872,273). Davies et al. disclose a method of making a pultruded part having a uniform cross-section using a novel reinforcing mat (abstract). The part is shown as a hollow, pultruded body having a uniformly spaced outer wall structure, an inner wall structure, and a resin matrix. The reinforcing mat of the present invention is typically located at or near the wall structures to increase transverse strength. The pultruded part is used to make fenestration products such as windows, doors, and the like (col 7, ln 24-36). The reinforcing fibers comprise metal fibers (col 4, ln 33-37). The resin matrix comprises thermosetting materials such as polyurethanes (col 9, ln 60-63). The reinforcing fibers are arranged into a mat that can have two layers of angled reinforcing fibers (col 14, ln 38-42).

Rejection is maintained.

Claim Rejections - 35 USC § 103

6. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/78529 (WO '529) in view of Kaiser (US 5,851,468). WO '529 discloses a pultruded part and a method of preparing a reinforcement mat for the part. The improved reinforcement mat is made up of a number of layers, including a layer having fibers which extend transversely of the mat and binding resin for the fibers. The invention is especially useful for pultrusion of parts for fenestration products (pg 1, ln 9-15). The mat and rovings are primarily glass products, while the resin matrix is a thermosetting material (page 1, ln 26-27). Holes are formed in the mat layers which extend through the thickness of the mat layers and receive binding resin therein for increasing the binding

effect of the resin upon hardening of the latter (page 4, ln 16-19). It should be noted that the Examiner is equating the holes in the reinforcing mat to be a scrim as required by the present invention. WO '529 discloses the claimed invention except for the teaching that the fibers are made of metal and that the resin is a thermosetting polyurethane.

Kaiser (US 5,851,468) discloses a reinforcing structural rebar comprising an inner core formed by pultruding reinforcing fibers (abstract). The thermosetting resin is preferably a polyurethane (col 3, ln 34-35). The reinforcing fibers include metal fibers (col 10, ln 66). It would have been obvious to one having ordinary skill in the art to have used Kaiser's thermosetting polyurethane and metal fibers in place of the thermosetting resin and glass fibers of WO' 520, motivated by the desire to create a pultruded article that has a higher tensile strength and structural integrity.

Regarding claims 1, 8, 9, 21, 22, and 23, it has been held that the basis weight of the fibers is a result effective variable. The weight of the fibers will directly affect the strength of the fabric. Therefore, it would have been obvious to one having ordinary skill in the art to have used a fabric having a total quantity of fibers of less than 0.5 ounces per square foot, less than 0.25 ounces per square foot, and less than 0.1 ounces per square foot, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized the basis weight of the fibers, motivated by the desire to create a fabric that has increased strength and durability.

Rejection is maintained.

Response to Arguments

7. Applicant's arguments filed February 6, 2006, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that the filing date of the present application is earlier than the filing dates of US 6,881,288 and US 6,872,273. This argument is not persuasive because both references have a provisional filing date of June 21, 1999, which is earlier than Applicant's filing date of June 14, 2001. Applicant further argues that because the WO 00/78529 reference was not published more than one year prior to the filing date of the present Application, it cannot be cited under 35 U.S.C. 102(b) and hence, it cannot be used in a rejection under 35 U.S.C. 103. This argument is not persuasive because the WO 00/78529 is a reference under 102(a) and therefore, is still prior art, and can be used in a rejection under 35 U.S.C. 103. Applicant further argues the use of the Kaiser (US 5,851,468) reference. However, the Kaiser was used as a secondary reference, along with the primary reference of WO 00/78529. Kaiser was used for its teaching that the fibers are made of metal and that the resin is a thermosetting polyurethane in combination with the teachings of WO 00/78529. Applicant cannot show non-obviousness by attacking references individually where, as here, the rejections are based on a combination of references. *In re Keller*, 208 USP1 871 (CCPA 1981). Therefore, the rejections are maintained.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C. Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

UCR *UCR*

Ula Ruddock
ULA RUDDOCK
PRIMARY EXAMINER